7. (Amended) An electronic-circuit unit comprising:

circuit elements, including a capacitor, a resistor, and an inductive device, formed as thin films on a surface of an alumina board having a rectangular, planar shape;

a semiconductor bare chip wire-bonded on the surface of the alumina board;

grounding electrodes formed near each end of two opposing side faces of the alumina board, the side faces being perpendicular to the surface of the alumina board; and

an input electrode and an output electrode formed along either of the side faces of the alumina board, the input electrode and the output electrode each being formed between the two grounding electrodes formed near each end of the side faces,

wherein the grounding electrodes, the input electrode and the output electrode each comprise an end-face electrode formed on the side faces of the alumina board.

- - REMARKS - -

Claims 1-8 were pending in the application. Claims 1, 3 and 5-7 have been rewritten. The changes to the rewritten claims from the previous versions to the rewritten versions are shown in Appendix A (attached hereto as Tab A), with brackets for deleted matter and underlines for added matter. No new matter has been added as a result of this amendment.

In the outstanding Office Action, claims 1 and 3-8 have been rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,784,261 to Pedder (hereinafter "Pedder"). Claim 2 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Pedder in view of U.S. Patent Publication No. 2001/0019865 to Erdeljac (hereinafter "Erdeljac") and U.S. Patent No. 5,478,773 to Dow (hereinafter "Dow"). The rejections are respectfully traversed. The claims have nevertheless been amended to further define the invention and to eliminate any ambiguity that may have been the basis for the rejections.

Independent claims 1 and 7 are each directed to an electronic-circuit unit comprising an alumina board having a planar surface and at least one side face formed perpendicular to the planar surface. A semiconductor bare chip and circuit elements

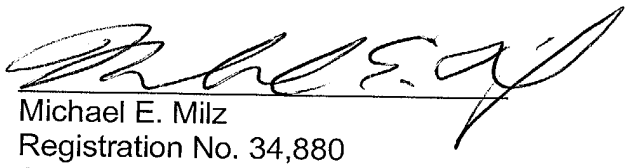
are mounted and formed, respectively, on the surface of the alumina board. End-face electrodes are formed on the side face of the alumina board. The claims of the present invention are therefore directed to electronic-circuit units wherein components are formed or mounted on the surface **and** the side faces of the alumina board. As set forth in detail in the specification, this structure permits greater component integration and a reduced unit size. These limitations and features are not disclosed or suggested by the prior art.

Although Pedder appears to disclose a circuit board (1) having several different electronic components (2 and 3) mounted thereon, it is apparent from the figure that these components (2 and 3) are only mounted on one surface of the board (1), i.e., the lower surface of the board (1) as shown in the drawing. In other words, Pedder fails to disclose or suggest forming electrodes on the side faces of the board (1). To the contrary, Pedder discloses the use of a polymeric encapsulent material (10) along the edges or side faces of the board (1) to provide thermal transfer between the boards (1 and 9). Erdeljac and Dow likewise fail to disclose these same limitations.

Accordingly, independent claims 1 and 7 are not rendered unpatentable by the prior art references, either alone or in combination. The remaining claims are dependent on either claim 1 or 7 and are therefore likewise patentable for the same reasons claims 1 and 7 are patentable.

Applicants have made a novel and nonobvious contribution to the art of circuit boards. The pending claims are believed to truly distinguish over the prior art and to be in condition for allowance. Accordingly, such allowance is now earnestly requested. If for any reason the Examiner is not able to allow the application, he is requested to contact the Applicants' undersigned attorney at (312) 321-4273.

Respectfully submitted,



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Appendix A

In the Claims:

Please amend claims 1, 3 and 5-7 as follows:

1. (Amended) An electronic-circuit unit comprising:

an alumina board having a planar surface and at least one side face formed perpendicular to the surface;

circuit elements, including a capacitor, a resistor, and an inductive device, formed as thin films on the surface of the alumina board;

an electrically conductive pattern connected to a circuit element, formed as a thin film on the surface of the alumina board;

a semiconductor bare chip mounted on the surface of the alumina board; and

an end-face electrode connected to the electrically conductive pattern, the end-face electrode being formed on [a] the side face of the alumina board,

wherein the semiconductor bare chip is wire-bonded to the electrically conductive pattern.

3. (Amended) An electronic-circuit unit according to Claim 1, wherein the end-face electrode comprises [is formed as] a thick film formed by the use of a low-temperature baked material.

5. (Amended) An electronic-circuit unit according to Claim 3, further comprising a plurality of end-face electrodes, wherein the surface of the alumina board has a generally rectangular shape bounded by four side faces formed perpendicular to the surface, and the end-face electrodes are each [is] formed as a thick film on only [at

each of] two of the four side faces, the two side faces being disposed along opposite edges of the surface [sides facing each other] of the alumina board.

6. (Amended) An electronic-circuit unit according to Claim 4, further comprising a plurality of end-face electrodes, wherein the surface of the alumina board has a generally rectangular shape bounded by four side faces formed perpendicular to the surface, and the end-face electrodes are each [is] formed as a thick film on only [at each of] two of the four side faces, the two side faces being disposed along opposite edges of the surface [sides facing each other] of the alumina board.

7. (Amended) An electronic-circuit unit comprising:

circuit elements, including a capacitor, a resistor, and an inductive device, formed as thin films on a surface of an alumina board having a rectangular, [plane] planar shape;

a semiconductor bare chip wire-bonded on the surface of the alumina board;

grounding electrodes formed [at the ends] near each end of two opposing side faces [sides facing each other] of the alumina board, the side faces being perpendicular to the surface of the alumina board; and

an input electrode and an output electrode formed [away from the ends] along either of the side faces of the alumina board, the input electrode and the output electrode each being formed between the two grounding electrodes formed near each end of the side faces,

wherein the grounding electrodes, the input electrode and the output electrode each comprise an end-face electrode formed on the side faces of the alumina board.